

Application No. 10/623,645
Amendment dated February 6, 2008
Reply to Office Action of November 6, 2008

Docket No. 0941-0796PUS1
Art Unit: 2635
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AMENDMENTS TO THE DRAWINGS

FIG. 3 is amended by canceling three reference characters 2a, 2b and 2c.

REMARKS

The Applicants thank the Examiner for the thorough consideration given the present application. Claims 3 and 4 are cancelled herein without prejudice to or disclaimer of the subject matter set forth therein. Independent claims 1 and 2 are pending, neither of which is amended. The Examiner is respectfully requested to reconsider the rejections in view of the amendments and remarks set forth herein.

Objection to the Drawings

In response to the objection to the drawings, FIG. 3 is amended by canceling three reference characters 2a, 2b and 2c.

Claim for Priority

The Examiner has acknowledged the Applicants' claim for foreign priority based on TW 91123210.

Amendments to the Specification

Paragraph [0019] of the specification has been amended to address the Examiner's objection.

Rejections Under 35 U.S.C. §102(b)

Claim 3 is rejected under 35 U.S.C. §102(e) as being anticipated by Nose (U.S. 2002/0163490)

While not conceding the Examiner's rejection, but merely to advance the prosecution of the present application, claim 3 has been cancelled.

Rejections Under 35 U.S.C. §103(a)

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nose (US Pat. App. No. 2002/0163490) in view of prior art taught by Nose; and.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nose in view of ZAVRACKY (US Pat. App. No. 2001/0054989) and in view of prior art taught by Nose.

Arguments Regarding Independent Claim 1

Independent claim 1 recites a data driver of a display forming an image frame by sequentially scanning horizontal lines, the data driver comprising: a shift register receiving image data of three primary colors in serial and outputting the image data of the three primary colors in parallel within each of scan durations of the horizontal lines; a sample and hold register acquiring the image data from the shift register; a gamma multiplexer outputting gamma reference voltages for the three primary colors in a sequence of the primary colors within each of the scan durations of the horizontal lines; three digital-to-analog converters for gamma calibration, receiving the image data of the three primary colors from the sample and hold register and the gamma reference voltages for the three primary colors from the gamma multiplexer, and outputting calibrated image signals of the three primary colors, respectively; and three buffers respectively receiving the calibrated image signals of the three primary colors from the three digital-to-analog converters, in the sequence of the primary colors.

By contrast, Nose does not teach, disclose or suggest *a shift register receiving image data of three primary colors in serial and outputting the image data of the three primary*

colors in parallel within each of scan durations of the horizontal lines.

Nose (paragraph 12, lines 1-11) describes “6 bits of R-color gray-scale data DR, 6 bits of G-color gray-scale data DG, and 6-bits of B-color gray-scale data DB all being fed from the display control circuit 13 are held, in parallel, in a data register section 164 being controlled by an output, which is controlled by a horizontal start pulse HSP and a clock signal HCK, fed at each stage in a shift register section 163. The above gray-scale data DR, DG, and DB being held in parallel in the data register section 164 are transferred collectively to a latch section 165 by a latch signal STB and then are latched therein”. Specifically, Nose merely discloses that the data register section 164 outputs the RGB data in parallel to the latch section 165. However, Nose fails to disclose or suggest *a shift register receiving image data of three primary colors in serial and outputting the image data of the three primary colors in parallel within each of scan durations of the horizontal lines.*

At least for the reasons described above, independent claim 1 is patentable over the cited arts, and the rejection of claim 1 should be withdrawn.

Independent claim 1 is in condition for allowance.

Arguments Regarding Independent Claim 2

Independent claim 2 recites a data driver of a display forming an image frame by sequentially scanning horizontal lines, the data driver comprising: a shift register receiving image data of three primary colors in serial and outputting the image data of the three primary colors in parallel within each of scan durations of the horizontal lines; a sample and hold register acquiring the image data of the three primary colors from the shift register; a

first multiplexer receiving the image data of the three primary colors from the sample and hold register and outputting them in a sequence of the primary colors within each of the scan durations of the horizontal lines; a second multiplexer outputting gamma reference voltages for the three primary colors in the sequence of the primary colors within each of the scan durations of the horizontal lines; a digital-to-analog converter for gamma calibration, receiving the image data from the first multiplexer and the gamma reference voltages from the second multiplexer, and outputting calibrated image signals of the three primary colors; and a buffer receiving the calibrated image signals from the digital-to-analog converter and outputting the calibrated image signals in the sequence of the primary colors.

Nose does not disclose or suggest *a shift register receiving image data of three primary colors in serial and outputting the image data of the three primary colors in parallel within each of scan durations of the horizontal lines.*

Nose (paragraph 12, lines 1-11) describes “6 bits of R-color gray-scale data DR, 6 bits of G-color gray-scale data DG, and 6-bits of B-color gray-scale data DB all being fed from the display control circuit 13 are held, in parallel, in a data register section 164 being controlled by an output, which is controlled by a horizontal start pulse HSP and a clock signal HCK, fed at each stage in a shift register section 163. The above gray-scale data DR, DG, and DB being held in parallel in the data register section 164 are transferred collectively to a latch section 165 by a latch signal STB and then are latched therein”. Specifically, Nose only discloses that the data register section 164 outputs the RGB data in parallel to the latch section 165. However, Nose does not teach, disclose or suggest *a shift register receiving*

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image data of three primary colors in serial and outputting the image data of the three primary colors in parallel within each of scan durations of the horizontal lines.

At least for the reasons described above, claim 2 is patentable over the cited arts, and the rejection of claim 2 should be withdrawn.

Independent claim 2 is in condition for allowance.

Independent Claim 4

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nose (US Pat. App. No. 2002/0163490) in view of Herrmann (U.S. 2003/0197674).

While not conceding the Examiner's rejection, but merely to advance the prosecution of the present application, claim 3 has been cancelled.

CONCLUSION

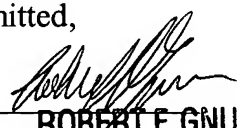
All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is believed that a full and complete response has been made to the outstanding Office Action, and that the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Joe McKinney Muncy, Reg. No. 32,334, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: February 6, 2008

Respectfully submitted,

By 
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Attachment: One Sheet of Replacement Drawings (FIG. 3) 